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Naval War College  
Newport, RI.

The Army  
...From the Sea  
The Army's Initiative to Enhance Operational Agility

by

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Major, United States Army

A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College, the Department of Navy or the United States Army

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17 June 1994

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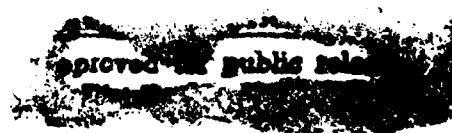
APPROVED BY:

Mark T. Clark

Faculty Research Advisor

Date

94-15348



94 6 20

124

## REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE			
4. PERFORMING ORGANIZATION REPORT NUMBER(S)		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
6a. NAME OF PERFORMING ORGANIZATION OPERATIONS DEPARTMENT	6b. OFFICE SYMBOL (If applicable) C	7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code) NAVAL WAR COLLEGE NEWPORT, R.I. 02841		7b. ADDRESS (City, State, and ZIP Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF FUNDING NUMBERS	
		PROGRAM ELEMENT NO.	PROJECT NO.
		TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) THE ARMY...FROM THE SEA: THE ARMY'S INITIATIVE TO ENHANCE OPERATIONAL AGILITY (U)			
12. PERSONAL AUTHOR(S) MAJ JACK R. BROWN, USA			
13a. TYPE OF REPORT FINAL	13b. TIME COVERED FROM _____ TO _____	14. DATE OF REPORT (Year, Month, Day) 8 FEB 94	15 PAGE COUNT 36
16. SUPPLEMENTARY NOTATION A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) ARMY PREPOSITIONING; THREAT; NSS; NMS; STRATEGIC MOBILITY; SEALIFT; AIRLIFT	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) THE ARMY AS PART OF ITS STRATEGIC MOBILITY PROGRAM (ASMP) RECENTLY LAUNCHED ITS ARMY RESERVE -3 PROGRAM (AR-3) TO PREPOSITION A HEAVY BRIGADE AFLOAT. AR-3, AS THE MARINE CORPS' MARITIME PREPOSITIONING FORCE (MPF), IS DESIGNED TO GIVE THE ARMY A RAPID ENTRY CAPABILITY INTO A THEATER OF OPERATIONS. THIS STUDY ANALYZES WHY THE ARMY IS PREPOSITIONING A HEAVY BRIGADE AFLOAT WHILE THE MARINE CORPS ALREADY HAS A PREEXISTING PROGRAM THAT PROVIDES FOR CRISIS RESPONSE.			
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL CHAIRMAN, OPERATIONS DEPARTMENT		22b. TELEPHONE (Include Area Code) 841-3414	22c. OFFICE SYMBOL C

**Abstract of  
The Army...From the Sea  
The Army Seeks to Enhance Operational Agility**

**The Army as part of its strategic mobility program (ASMP) recently launched its Army Reserve -3 program (AR-3) to preposition a heavy brigade afloat. AR-3, as the Marine Corps' Maritime Prepositioning Force (MPF), is designed to give the Army a rapid entry capability into a theater of operations. This study analyzes why the Army is prepositioning a heavy brigade afloat while the Marine Corps already has a preexisting program that provides for crisis response.**

**The analysis demonstrates that the change in Army prepositioning to include a heavy brigade afloat is necessary to meet the changing threat and to comply with the National Security Strategy (NSS), National Military Strategy (NMS), and identified requirements by CINCs. This analysis concludes that the Army's combat brigade afloat initiative is an enabling force of theater level campaigning with unique and complementary capabilities.**

**The Army's brigade afloat program provides from the sea -- a versatile, lethal, sustainable, and expansive heavy brigade. AR-3 is critical to ensure the nation has a heavy crisis action force. The combination of AR-3 and MPS gives a CINC a catalog of options to mix based upon his METT-T (Mission, Enemy, Troops available, Terrain, and Time) assessment.**

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THE ARMY...FROM THE SEA  
THE ARMY SEEKS TO ENHANCE OPERATIONAL AGILITY

CHAPTER I

INTRODUCTION

The Problem. The mission of the United States Army is to deter war or aggression through forward presence and power projection, and if deterrence fails, to achieve decisive victory against the threat anywhere in the world.<sup>1</sup> The Army, unlike the Air Force and the Navy, cannot conduct its mission without strategic lift provided by the other services.

Until the recent Mobility Requirements Study (MRS), strategic mobility has proved to be a source of frustration for the Army. The Army has achieved only minimal success in past efforts to influence sealift and airlift programs.<sup>2</sup> The MRS called for a significant increase in the strategic mobility assets directly apportioned to the Army. For the first time, the Army will station a heavy brigade afloat similar to the Marine Corps Maritime Prepositioning Force (MPF). This program has been designated Army Reserve - 3 (AR-3).

Many Marines feel that the Army has invaded the Corps' imminent domain. Some members of the Navy and the Marine Corps have expressed concern that the MRS was unfairly biased in favor of improving the Army's strategic mobility assets prior to the study being conducted. They believe AR-3 is an unnecessary duplication of effort.<sup>3</sup>

Considering the change in the Army's mission from global containment of Communist aggression to that of power projection in regional contingencies, is the Army's heavy brigade afloat truly needed? What advantages and disadvantages does it present to the operational commander, particularly in light of the preexistence of the Marine's MPF. Does AR-3 enhance the CINCs operational agility in responding to crisis in his theater? In considering the operational role of AR-3, it is important to consider why the Army is prepositioning a heavy brigade afloat. This paper examines how the AR-3 concept evolved in view of the changing threat, the current National Security Strategy (NSS), the National Military Strategy (NMS), the Mobility Requirements Study (MRS), and the recently concluded Bottom-Up Review (BUR). It examines capabilities of the AR-3 and the MPF and their respective roles and missions relative to each other across the spectrum of war.

Additionally, in consideration of the current NSS and the NMS, it will determine whether the AR-3 program is essential in meeting the nation's strategic goals.

## CHAPTER II

### HISTORICAL ANALYSIS

#### ARMY PREPOSITIONING.

Throughout the Cold War the United States Army's doctrine was based on maintaining a large forward presence to deter Communist aggression. In the early 1960s, the Research Analysis (RAND) Corporation, the Joint Chiefs of Staff (JCS) and Commander in Chief, Europe (CINCEUR) conducted numerous studies concerning strategic mobility, force projection, and forward deployment.<sup>1</sup> During the Cold War, National Military Strategies (NMS) called for a large, forward deployed Army to be reinforced in 14 days with two heavy divisions (later expanded to six) from the continental United States (CONUS).<sup>2</sup> RAND concluded that while airlift was much faster, it was not by itself a viable option. It could only play a supporting role in overall strategic lift due to the lift versus cost ratio; fiscal resources were constrained. Sealift, while more economical and possessing enormous lift capability, could not meet the 14 day deployment window establish by the JCS. CINCEUR, in 1961, made a recommendation to store unit sets in prepositioning sites in Germany.<sup>3</sup> RAND subsequently concluded that a mix of airlift,

sealift, and prepositioning was the only viable option. This mix became known as the Strategic Mobility Triad (SMT).

In 1966, RAND's Richard Rainey explored, options of land based and maritime prepositioning:

"If the forces are to be of value in halting aggression before it is well under way, then they must be introduced somewhere close...In order to devise the preferred system, it is necessary to consider combinations of these transportation means along with preposition of materiel somewhere in the theater. One possibility might emphasize the prepositioning of materiel on ships located in theater, relying on airlift to bring personnel from both the United States and theater."

Land based prepositioning was selected as the best option for the European theater during the Cold War for a number of reasons: First, land base prepositioning was less destructive to the equipment. Second, it is much cheaper and easier maintain the equipment. Third, Germany provided the land for the prepositioning sites and NATO helped defray the cost. Finally, the response time for deployment to Tactical Assembly Areas (TAA) was much quicker and had fewer complications.

The Army referred to its land base prepositioning program as the Prepositioning of Materiel Configured Unit Sets (POMCUS). They conducted an annual training program, Return of Forces to Germany (REFORGER), to maintain training readiness. Each year, Army units deployed to Germany, via air and sea, drew

their equipment at POMCUS sites, and then moved to their TAAs.

This massive mobilization helped demonstrate the resolve and commitment of America to NATO.

An Evolving Threat.

The Conventional Forces in Europe (CFE) treaty and the demise of the Warsaw Pact in 1989 signaled a shift from the bi-polar NATO versus Warsaw Pact, global scenario to scenarios of regional conflict. "Bi-polar super power confrontation had subsumed most regional problems as each side ensured discipline over those states within its sphere of influence."<sup>8</sup> The lessening of global tensions resulted in an escalation of regional conflicts as this discipline deteriorated and on-going ethnic animosities were allowed to surface.<sup>9</sup>

National Security Strategy (NSS).

President Bush, speaking at the Aspen Institute in Aspen, Colorado, on August 2, 1990 outlined the new NSS:

"In an era when threats may emerge with little or no warning, our ability to defend our interests will depend on our speed and agility. And we will need forces that give us a global reach. No amount of political change will alter the geographic fact that we are separated from many of our most important allies and interest by thousands of miles of water...A new emphasis on flexibility and versatility must be our guide."<sup>10</sup>

At the same meeting, Secretary of Defense Dick Cheney detailed the new NSS, shifting the strategy of the nation from the more predictable global containment scenario to a less predictable strategy of regional crisis response. The national defense strategy consists of four essential elements: strategic deterrence and defense; forward presence; crisis response; and reconstitution. The two elements that play a critical role in the changing mission of the Army are forward presence and crisis response.<sup>11</sup>

National Military Strategy (NMS).

General Colin L. Powell, the Chairman of the Joint Chiefs of Staff, outlined in the January 1992, a new National Military NMS based on the NSS. At the center of the NMS is a national contingency force concept<sup>12</sup>. The CONUS based contingency force includes five Army divisions, seven Air Force fighter wings, and a Marine Expeditionary Force (MEF). Naval carrier battle group involvement was not detailed but was alluded to. The contingency force supports all theaters. CINCs have the option of using assigned forces, forces from the U.S. based contingency force, special operations forces (SOF) or a combination of them.<sup>13</sup> Army Contingency Corps. The Army provides XVIII Airborne Corps to the contingency force. This corps consists of five divisions

and a headquarters. The Corps is tailorable, sustainable, and has airborne vertical forced entry capability. The five divisions in the contingency corps include one airborne division, one air assault division, one light infantry division and two heavy divisions. The two heavy divisions have three active duty brigades, and each is assigned an additional heavy brigade from the reserves. The reserve brigades deployment timeline is yet to be worked out.

In April 1991, the Army Chief of Staff briefed Congress on the Army's plan for regional crisis response. Congress approved the plan, which included a prepositioned heavy brigade afloat. The congressionally approved standard force flow mandates that:

"the lead brigade (airborne or light infantry) will be on the ground by C+4. The 7th transportation group will arrive at the same time with necessary equipment to open air and sea ports. Two heavy divisions (sealift) arrive from CONUS by C+30. The CINC chooses the mix: armored, mechanized, air assault. The full corps (Five divisions and a Corps Support Command (COSCOM) closed by C+75. A fully supported heavy combat brigade with sufficient supplies to sustain the corps until lines of communication are established, must be prepositioned afloat."<sup>14</sup>

The new NSS and NMS mandated that the Army be able to deploy a full corps in almost half the time it did in Operation Desert Shield/Storm (ODS). Lessons learned from ODS indicated that there were already significant problems with our strategic mobility.

## CHAPTER III

### THE STRATEGIC MOBILITY CHALLENGE

#### Mobility Requirements Study (MRS).

Congress tasked the Joint Chiefs of Staff (JCS) and the Department of Defense (DOD) in 1991, to determine the nation's future strategic mobility requirements. The goal of the study was to develop an integrated strategic mobility plan for the armed forces consistent with the NSS and the NMS. As a result DOD conducted the Mobility Requirements Study (MRS).

#### MRS Analysis.

Although the January 1992 NMS was not published until after the MRS, the NMS's contingency force requirements, particularly, those of the Army's contingency corps which include the heavy brigade afloat, were a driving factor in the MRS. The study conducted 90 different war games using various regional contingencies covering the entire the spectrum of conflict. It attempted to minimize risk using factors of time (early risk, late risk), cost (based upon current budgets, medium cost alternatives and high to optimally minimize risk), and support.

The scenarios included contingency operations in Southwest Asia, Asia, Korea, Europe and others.<sup>15</sup> The Desert Storm scenario,

using President Bush's base force, was considered the worst case scenario. The board decided that the level of risk they were willing to accept in this scenario was medium confidence with medium cost. The use of a prepositioned heavy brigade proved to be the only way to achieve acceptable risk and cost levels. The heavy combat force had to be operational by C+14 and be capable of providing moderate support.<sup>16</sup> The study validated the heavy brigade afloat concept.

Sealift.

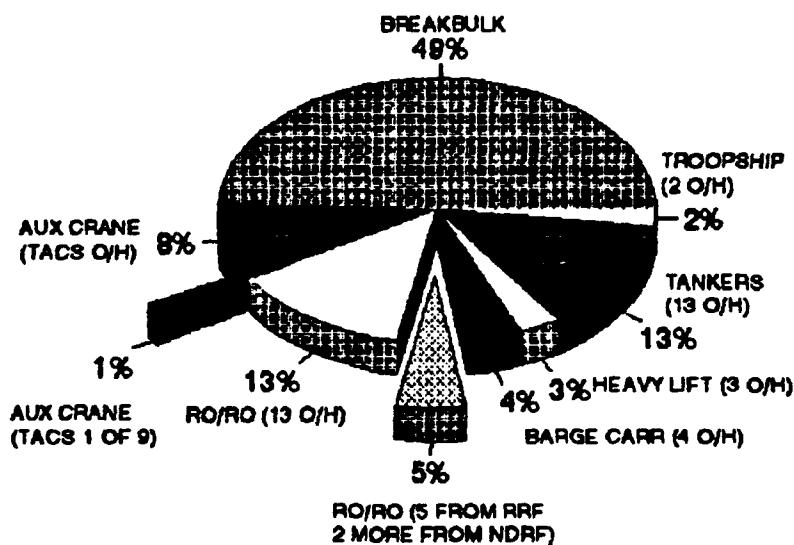
The MRS recommended the acquisition (by the Navy) of eight Large Medium Speed Roll-on-roll-off (LMSRs) ships, and two container ships for the Army's prepositioned heavy brigade afloat, and eleven LMSRs to support the Army's contingency corps' surge (deployment by sea of two heavy divisions by C+30). In addition, the board dedicated eight Fast Sealift Ships (FSSs) already in service with the Military Sealift Command (MSC) to support Army surge. The Ready Reserve Fleet is to expanded from 96 to 140 ships by FY 97. The MRS mandate specifies that 36 of the 140 ships must be RO/ROs. The RRF provided the Army eight RO/ROs until the eight LMSRs under construction by the Navy are ready.<sup>17</sup>

The MRS's decision to dedicated the eight FSSs to the Army has a negative impact on the Marine Corps. In the past the Corps has depended on the same eight FSSs to deploy its Amphibious Follow On Echelon (AFOE). This creates a substantial problem that hinders the Corps ability to deploy its follow force.

One misconception is that the interim ships provided to the Army by the RRF seriously degraded the RRF's ability to support the Marine Corps. This is not the case. The one Auxiliary crane (TACS) and five RO/ROs taken out of the RRF in reality had little impact upon the overall RRF (see fig 1).

Figure 1

### THE READY RESERVE FLEET COST OF AR-3



### Airlift.

The MRS also recommended the procurement of a fleet of 120, C-17 aircraft, to be fielded by FY 2006; 40 are currently funded. These are replacements for the aging fleet of C-141s. Three of twelve C-17s have been delivered to the first operational squadron in Charleston, South Carolina. The squadron is scheduled to take delivery of all twelve by July 1995. The C-17 costs approximately 320 million dollars per plane. DOD is reluctant to fund the C-17 because it's extremely over budget and does not meet the specified performance criteria. If the funding for the additional C-17s is not approved, the future of strategic airlift looks dismal.

The United States still has to make some tough choices on strategic airlift. Ten years ago a decision to go with a strategic lift program based on a combination of C-5Bs and C-130s could have filled our strategic airlift requirements at a reasonable cost. DOD decided to go with the high tech upgrade between the C141 and the C-5B, and now have a bill they might be unable to pay. The C-5B assembly line is closed. We have a total of 109 C-5Bs. The fleet of C-141 will probably be retired by the year 2006. DOD must get a handle on strategic airlift.

## PREPOSITIONING.

The MRS and the recently concluded Bottom-Up Review (BUR) determined that the Army can no longer focus its prepositioned combat sets in one primary area. It must be equally ready to respond to threats in Europe, Southwest Asia, and Korea. The Army now has five regional sites. These sites are designated AR-1 through AR -5 (Army Reserve).

The heavy brigade afloat (AR-3) is a critical part of the regional prepositioning plan. AR-3 is used as a swing set of POMCUS. It is slated against both Southwest Asia and Korea.

AR-3 enables the Army to project a heavy combat force into Southwest Asia, Korea or other areas. AR-3 provides an enabling force for Southwest Asia and a reinforcing capability for Korea.

Figure 2

ARMY GLOBAL PREPOSITIONING STRATEGY FOR REGIONAL CONTINGENCIES		
<u>REGION</u>	<u>LAND PREPO BDE SETS</u>	<u>AFLOAT PREPO SETS</u>
SOUTHWEST ASIA	2 USA (AR-5)	1 USA (AR-3)* 1 USMC (MPSRON #2)**
PACIFIC	1 USA (AR-4)	1 USA (AR-3)* 1 USMC (MPSRON #3)**
EUROPE	5 USA (AR-2) 1 USMC (NORWAY)	1 USMC (MPSRON #1)**

\* AR-3 IS A SWING SET BETWEEN SWA AND KOREA  
\*\* MPSRONS MAY BE DEPLOYED SINGULARLY OR COLLECTIVELY  
NOTE: AR-1 IS CONUS BASED SUSTAINMENT STOCKS

As with all missions, economy of force should be considered. AR-3 allows for the flexibility of repositioning assets to strengthen any theater of operations with a heavy brigade and a heavy support package. It can be used as an enabling force where light forces have started a buildup or as a reinforcing brigade to a more mature theater of operations. It offers a dynamic capability across the spectrum of war from high intensity to operations other than war.

Figure 3

### THE SPECTRUM OF WAR

STATES OF THE ENVIRONMENT	GOAL	MILITARY OPERATIONS	EXAMPLES
WAR	FIGHT & WIN	WAR	*LARGE SCALE CBT OPNS *ATTACK *DEFEND C O M B A T O
CONFLICT	DETER WAR & RESOLVE CONFLICT	OPNS OTHER THAN WAR	*STRIKES & RAIDS *PEACE ENFORCEMENT *SUPPORT TO INSURGENCY *NEO *PEACE KEEPING M B A T
PEACETIME	PROMOTE PEACE	OPNS OTHER THAN WAR	*COUNTERDRUG *DISASTER RELIEF *CIVIL SUPPORT *PEACE/NATION BUILDING

These states could all exist at once in the theater commander's environment. SOURCE FM100-5 PG 2-1.

## CHAPTER IV

### The Army's Heavy Brigade Afloat (AR-3)

#### Army Reserve-3.

The Army's brigade afloat, is a rapid deployment force that is versatile, lethal, sustainable, and expansive. AR-3 is defined in the Army Strategic Mobility Program (ASMP):

"The floating army reserve (AR) program consists of crucial common items and equipment for light, airborne, air assault, mechanized and armored divisions which will be strategically positioned, include global applicability and support multiple CINCs. The total program will utilize 16 vessels.<sup>18</sup>

The AR-3 package will consist of a 2X2 heavy brigade equivalent. This means the prepositioned combat equipment can be configured either as a balanced heavy brigade of two M1A1 Abrams tank battalions and two M2A2 Bradley infantry battalions or as an armored cavalry regiment (ACR). Fifteen days of supplies are stored for the heavy brigade and its support battalion. Additional combat power and combat multipliers include a multiple launch rocket system (MLRS) battery, an M109 self-propelled artillery battalion, a Patriot missile battery, and a combat engineer battalion.

One of the significant shortfalls identified in lessons learned from ODS was the lack of logistical support and expertise during the early risk window. The Army not only has to worry about its own combat service support (CSS), but must also provide common service support to all the Armed forces.<sup>19</sup> AR-3 gives the Army a force projection logistics capability which was lacking during these first two weeks of the Gulf War. In addition to the brigade's separate support battalion, there are divisional, corps, and theater level combat service support (CSS) elements, each equipped with 15 days of supplies. The ships also contain supplies for the 5 deploying divisions through C+30.

Operation Restore Hope provided the Army's maritime prepositioning program with some valuable learning experience. As a result of lessons learned, the Army Chief of Staff directed that the Army adopt a modular concept similar to that which the Marine Corps established after ODS.

A major problem the Army faced in Operation Restore Hope was the inability to unload their field hospital in Somalia due to several problems with the port and infrastructure. As a result, ships were added to the AR-3 package, to include a second Heavy Lift PREPO Ship (HLPS) for enhanced port opening operations and the Auxiliary Crane ship (T-ACS). Significant improvements were

also made in the Army's Joint Logistics Capability Over Shore (JLOTS). In future operations cargo handling and offloading will be conducted by the 7th Transportation Group (active duty) from FT. Eustis, VA. The group has four service terminal companies and two cargo transfer companies. This ensures that AR-3 can be off-loaded in a timely manner.

AR-3 will be anchored at Diego Garcia in the Indian Ocean. Ships will be under the operational control (OPCON) of a unified combatant commander but under the administrative control (ADCON) of the Military Sealift Command (MSC). The United States Army Material Command (USAMC) is responsible for administrative direction, support, and control of equipment and supplies. When AR-3 is alerted, the initiation directive will specify the command relationships by phases. The AR-3 phase of the operation will terminate once the brigade's personnel link up with their equipment and the brigade commander and the port support activity agree.<sup>20</sup>

## CHAPTER V

### COMPARATIVE WORTH

The question of comparative military worth is difficult to assess.<sup>21</sup> Does it meet the guidelines set forth in the NSS, NMS, and FM 100-5? Does it enhance the operational commander's agility? In order to measure the operational effectiveness of AR-3, it must be examined in light of the Army's mission. The national defense strategy is based upon the four essential elements: strategic deterrence and defense; forward presence; crisis response; and reconstitution.

#### Strategic Comparison.

How does AR-3 measure up in the area of strategic deterrence and defense? The Marine Corps' MPS program was a tremendous success in the Persian Gulf War but it was not a successful deterrence. It is doubtful that the AR-3 program, in and of itself, will be much of a deterrent. But there can be no doubt that AR-3, coupled with the Maritime Prepositioned Ship Squadrons (MPSRONs) of the Marine Corps, provides a much more credible contingency force to be reckoned with (see appendix 1). Joint training exercises should be conducted to exercise the MPSRON and the AR-3 sequencing the two into the same area. These annual

exercises would be along the line of the old REFORGER exercises. The word would soon get around that the US is committed to the use of military force when necessary. The additional tank killing capability of a heavy brigade to include M1A1 tanks, Bradleys and Multiple launch Rocket Systems (MLRS), definitely enhances the lethality and survivability of the force.

How does it measure up regarding Forward Presence? The enemy is no longer waiting on the other side of the fence; the global threat has diminished. AR-3 enhances the Army's ability to conduct forward presence in regions where forces are not normally based, when sixteen of twenty divisions are CONUS based (figures include active and reserve). AR-3 gives the Army a capability to shift forward presence with the threat.

A crisis, by definition, means quick response is critical.

"The capability to respond to regional crises is one of the key demands of our strategy. Regional contingencies we might face are many and varied, and could arise on very short notice. US Forces must therefore be able to respond rapidly to deter and, if necessary, to fight ... Our strategy also recognizes that when the United States is responding to one substantial regional crises, potential aggressors in other areas may be tempted to take advantage of our preoccupation."<sup>22</sup>

While the 82nd Airborne division continues to be an important part of the Army's crises response force, the recent

increase in the exportation of Russian armor, often requires the use of heavy forces.

Another aspect of the Army's crisis response is for humanitarian and disaster relief. AR-3's "linebacker" module is specifically designed for this mission. The "linebacker" module consists of two ships. "Linebacker" can be employed separately or in conjunction with the rest of AR-3. It provides: port support; large quantities of MREs; water purification; water trailers; medical support; a 500 bed field hospital; forklifts; line haul support; a combat engineer company and an active duty civil affair (CA) company.

Reconstitution of forces is considered at the national level as the regeneration of forces through the mobilization of the industrial base. However, at the corps level, it implies a prepackaged, fully manned, and armed module such as AR-3, that can replace a brigade on the front line.

FM 100-5 states that "Army forces must be deployable, expandable and capable of achieving decisive victory."<sup>23</sup> AR-3, with its modular design which enables commanders to tailor their force package for rapid deployment, gives the Army this capability. The U.S. deployment to Somalia illustrates this point. Under the old system, only one Ready Company from the

Ready Force from the 24th Infantry Division could deploy to Somalia in the same amount of time it takes the entire AR-3 package to arrive -- with 18 times the combat power!<sup>24</sup> AR-3 is also expandable and has combat service support elements from company to theater level. It is designed especially as an enabling force with enough combat power to achieve decisive victory and the logistic support to set up the infrastructure for the follow on forces if needed. It has the systems and the supplies to enable the rest of the contingency corps to deploy.

#### MPS Comparison.

Some argue that AR-3 is redundant to the Marine Corps MPS. There are obvious similarities and capabilities. Both are maritime prepositioning programs of combat equipment that give their service a benign entry capability. Both provide flexibility along the spectrum of war for utility across the spectrum. There are, however, significant differences.

A Marine Expeditionary Force Forward (MEF FWD) has 16,500 personal and can put a tremendous amount of "trigger pullers" on the ground. The AR-3, with its two mechanized infantry battalions combined at 100% strength, can only put 432 dismounts on the ground. If large numbers of dismounted troops are needed, AR-3 is not the correct answer. However, if a CINC is facing a

sustained armor war, then AR-3 provides the unique advantage with ATACMs (see annex 2), MLRS, 123 tanks, and 154 Bradleys. For close air support operations, the Marines have an organic air force which works directly for the ground commander. When defending or attacking urban areas due to the number of dismounts MPS would be the force of choice. If the theater has open rolling terrain, however, the enemy is an armor threat, AR-3 should be favored. If the theater of operations is densely wooded large numbers of dismounts are difficult to beat.

In short, each has its own unique capabilities and limitations. The military needs both, thus allowing the CINC to tailor his forces or reinforce forces with the proper mix based upon his estimate of the situation. Both AR-3 and MPS give the CINC the ability to achieve operational agility.

In an effort to gain a further appreciation of AR-3 lets examine two short and simple scenarios.

Scenario #1.

The first scenario will be at the low end of the spectrum. A earth quake occurs in country "A". Hundreds are dead, thousands are injured and left homeless, electricity is out in many areas, water and sewage line have been ruptured. The CINC can alert either a MPS or AR-3. In this case he alerts AR-3. The

contingency force is alerted and the linebacker module of AR-3 is activated. Linebacker is especially designed for disaster relief and humanitarian assistance. It steams to country "A" conducts in stream JLOTS because the port infrastructure will not support the ships. Linebacker provides port support, airfield support, Medical support to include a 500 bed field hospital, Line Haul support, Water trailers, forklifts, a combat engineer company that is capable of fixing the water lines, sewer lines and many other of the infrastructure problems and an active duty civil affairs company to help orchestrate the process. The AR-3 package can be used independent or in conjunction with MPS.

Scenario #2.

The second scenario will be at the high end of the spectrum. The area will be desert terrain, flat with large wades. Country "I" with a force of 25 divisions, 2,500 tanks, 3,000 BMPs, 650 pieces of artillery, and a small air force of 27 MIG-25s invades their small neighboring country to the Southwest (country "A"). Country "A" and their neighbor to the west country "B" ask for immediate military intervention by the United States. Country "B" makes available port facilities and staging areas. The President and the Chief of the Joint Chiefs of Staff authorize the CINC to alert and mobilize the contingency force. MPSRON 2 and AR-3 at

Diego Garcia immediately begin to steam to country "B's" port. Two CVBGs are alerted to the area. At C+4 country "I" has defeated country "A" in detail and halting for an operational pause. The lead brigade of the 82nd Airborne Division is REDCON 1, on the ground in country "B". The 7th Tans group and the advance party for the AR-3 brigade are in the port in country "B". The first CVBG is off the coast and the MEU is linked up with the 82nd. Two composite air wings from the Air Force is on the ground coordinating with the 82nd. The CINC and his staff are now on the ground. The CINC is the unified combatant commander. His staff coordinates with country "B" and remnants of country "A's" armed forces. NLT C+\* MPSRON 2 and AR-3 arrive in port. As Navy reservist and the MEU unload MPSRON 2, 7th Group and the advance party for the heavy brigade unload AR-3. C+12 the 82nd Infantry Division in total is on the ground, C+14, the MEF FWD is combat ready with 30 tanks, 109 AAVs, 30 LAVs, 30 155 Howitzers, and their complete ACE. The C+15 the heavy brigade lands and falls in own its equipment.

The CINC at this time has a combat ready force of the 82nd Airborne Division, 2 composite Air wings, two CVBGs, and a heavy brigade.

Because of AR-3 the 82nd and the Brigade have 15 days supplies on hand. The Army logistic system from company to theater level is functional. By C+30 two heavy divisions or one heavy and an air assault division have closed. C+75 two more divisions have closed and the entire COSCOM.

## CHAPTER VI

### CONCLUSION

The nature of war has not changed but the threat has. The emerging threats necessitates that the Army moves to adaptable force packages. The NSS, NMS, MRS, and BUR all mandate that today's Army must be capable of crisis response across the spectrum of conflict. AR-3 meets this criteria. It gives CINCs a rapid response heavy capability that can be employed independently, as reinforcement, or an enabling force for follow-on heavy forces.

It is intuitively obvious to even the most casual observer that AR-3 is ambitious undertaking. It is full of challenges to overcome. Synchronization of sequencing is absolutely critical. Joint training exercises are paramount. AR-3 is a small step in the right direction of meeting the strategic mobility challenges facing the nation. While there are overlapping capabilities between MPS and AR-3, they are complementary not duplicative.

AR-3 provides from the sea -- a versatile, lethal, sustainable, and expansive heavy brigade. The combination of AR-3 and MPS gives a CINC a catalog of options to mix based upon his METT-T assessment.

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**APPENDIX I**  
**COMBAT POWER**

**COMBAT COMPARISON**  
**AR-3 VERSUS MPSs**

**TABLE 1**

<b>COMBAT POWER COMPARISON</b>		
<b>A-3 <u>VERSUS</u> MPSs</b>		
<b>SYSTEM</b>	<b>AR-3</b>	<b>*MPSs</b>
M1A1 TANKS	123	90
M2A2 BIFV	154	0
LAV-25	0	*90
TOW	**0	**216
MLRS	9	0
HOWITZER 155 (T OR SP)	24	90
TRACK W/50 CAL MG	344	327

\* LAVs probably not all LAV-25  
 \*\* MPS each have three AT PLTs  
 AR-3 each M2 has TOW.

**NOTE: TABLE I MPSs FIGURES INCLUDE ALL THREE MPSRONs COMBINED,  
GROUND EQUIPMENT ONLY.**

**Amphibious Assault Vehicles** - Current version AAV7A1, tracked personnel carrier, carries 18 combat equipped marines and a crew of three. Weapon system M2 .50 cal machine gun, passive night sight, smoke generating system. The existing single gun weapons station (turret) is being replaced with the up-gunned weapons station which contains both the M2 .50 cal machine gun and the MK19 Mod III 40 mm machine gun. Each MPSRON has a total of 109. Capable of providing transport for 1, 962 infantry men per MPS.

Light Armored Vehicle (wheeled) - fully amphibious. Comes in six versions, the LAV 25 mounts the same 25 mm cannon as the Bradley Infantry Fighting Vehicle, has a 7.62 coax machine gun. Carries a basic load of 210 25mm rounds and 410 rounds of 7.62. Speed 62 mph, range 415 miles. Can be used for command and control, mortars, anti-tank and troop mobility. Carries six troops. The LAV-25 does not possess the thermal day/night sight and standard TOW capability of the Bradley but has the advantage of speed and mobility. It can therefore be deployed from one part of the country to another faster than a tracked vehicle. Each MPSRON has a total of 30. Capable of providing transport for 180 infantry men per MPS.

M1 Main Battle Tank - The Marines have the A1 model with a 105mm main gun, a 7.62mm coax machine gun, and the 50 caliber machine gun with gyrostabilization added. It can fire on the move. It can carry a basic load of 63 rounds of 105 ammunition, 6,000 rounds of 7.62 and 900 rounds of 50 cal. Cruising range is 310 miles.

155mm Howitzer (towed) - Each MPS has 30. It fires conventional ammunition almost 13 miles and rocket-assisted 19 miles. The Marine Corps tows the 155mm howitzer by truck. (mobility can be a problem).

M1A1 Main Battle Tank - much improved over the M1. Mounts a 120 smooth bore gun, improved armor and fire controls.

M2A2 Bradley Infantry Fighting Vehicle - Stabilized 25mm cannon with a 7.62 mm coax machine gun with twin TOW anti-tank missiles. Integrated thermal day/night sight. basic load 900 rounds of 25mm, 1,340 rounds of 7.62, and nine TOW missiles (2 in the tube, 7 in the racks), mounts external smoke grenades, swim capable. Tank killing capabilities, the 25 mm cannon fires armor piercing tank rounds capable of killing the T-72 tank. Speed 41 mph, range 300 miles, vertical obstacle 3 feet, trench clearing capability 8 feet, 4 inches.

Multiple Launch Rocket System (MLRS) - built on the same chassis as the M2 Bradley, Standard range 28 miles, ATACMs 150 miles plus. has twin boom crane for self loading, carries two pods of six missiles each. Launch pod ripples of up to twelve rockets can be fired at anyone time, automatic reaim. Fires several ammunition variants to include the M77 dual purpose shaped charge fragmentation bomblets capable of defeating light armor, or anti-tank mines that are ejected at a pre-determined height of around 1200 meters above the target area; individual mines are then released to parachute down. one pod fires 7 SPLL, a single SPLL can lay 336 mines into an area 1 KM X 5 KM within one minute, penetrates 5.5 inches of homogeneous rolled steel. The SADARM and ATACMs munitions are both radar terminally guided submunition. actively acquires the target. (AR-3 has a battery of 9 MLRS).

M109 155mm Howitzer (self-propelled) - Range 14 miles, cruising range of vehicle 217 miles, vertical obstacle 1ft, 9 inches. trench 6 feet., armament .50 cal. machine gun.